

REMARKS

Claims 124-129 are pending in this application. The claims are not amended; however, applicants herewith provide a clean set of the pending claims for the convenience of the examiner. The Office Action is discussed below:

Anticipation Rejection and Response to Arguments:

On pages 2-4 of the office action, the examiner has maintained the alleged anticipation rejection of claims 124-129 in view of Dijkstra *et al.* ("Crosslinking of Ultra-high Molecular Weight Polyethylene in the Melt by Means of Electron Beam Irradiation" published May, 1989) and claims 127-129 in view of Hyon *et al.* (U.S. 6,168,626, filed May 6, 1996). Applicants disagree with the examiner and submit that the examiner's position has not been consistent. Applicants note that, in one of the previous Office Actions the examiner asserted that claims 127-129 "do not specify the order of process of irradiating and heating steps" (see page 2 of the Office Action of November 14, 2007). Since applicants amended the claims to address the issue and pointed out that the claims 127-129 clearly recite step by step the process for preparing an orthopaedic implant prosthesis, the examiner asserts that "[t]here is no requirement for the instant claims to specify the order of heating and irradiation." (see page 2 of the Office Action).

The examiner states on page 2 of the Office Action that the prior art rejection stands because the claims, as written, can be interpreted as reciting a method of heating before irradiation and also a method of irradiation before heating. It is not clear what the examiner intended to mean while, in one hand the examiner asserted that "claims do not recite more than one heating and/or irradiation step or simultaneous heating and irradiation" and on the other hand, opines that "Even if this fact were disclosed in the Patent, there is no mention or evidence that the material is heated or cooled between passes" and further opines "this argument is irrelevant to the instant claims which do not require more than one heating and/or irradiation step."

Applicants submit that there is evidence in the specification that "the material is heated or cooled between passes". In this regard, applicants point out that even if the

heating or cooling in-between the passes are not mentioned, cooling during the pause (in-between the passes or irradiations) and continued heating are inherent in the process, and are clear to one skilled in the art. In this context, applicants invite the examiner to consider that:

"By disclosing in a patent application a device that inherently performs a function or has a property, operates according to a theory or has an advantage, a patent application necessarily discloses that function, theory or advantage, even though it says nothing explicit concerning it. The application may later be amended to recite the function, theory or advantage without introducing prohibited new matter. *In re Reynolds*, 443 F.2d 384, 170 USPQ 94 (CCPA 1971), *In re Smythe*, 480 F. 2d 1376, 178 USPQ 279 (CCPA 1973)." (see MPEP §2163.07 (a) Rev. 6, September 2007).

Again, it is not clear what the examiner meant by the following that "A reduction to practice, as evidenced in the Rule 1.131 Declaration of Merrill et al filed 06-08-2007 wherein polyethylene is first melted and then irradiated is not evidence of reduction to practice of a method wherein irradiation is followed by subsequent melting." Applicants remind the examiner regarding the evidence in the Declaration of Merrill *et al.*, filed June 8, 2007 under Rule 1.131, which the examiner agreed (see Office Action of September 7, 2007, page 2) that the evidence presented shows reduction to practice of the instantly claimed methods before January 20, 1995. It also was evident that the polyethylene was first melted and then irradiated (see the Declaration of Merrill *et al.*, sections 10-11 and item b of Exhibit 1, for example), which sufficiently provides the evidence of reduction to practice of the claimed method. Hence, a method that involves irradiation is followed by subsequent melting to treat a polyethylene preform was reduced to practice before January 20, 1995. Accordingly, Hyon is not a prior art to the claimed invention.

Applicants also point out that the Hyon *et al.* patent, however, is Section 102(e) prior art against the U.S. Patent No. 6,316,158 (Saum *et al.*, the '158 patent). Applicants also remind the examiner that the instant claims were filed to provoke an interference with the claims of the '158 patent. Accordingly, withdrawal of the rejection is solicited.

On page 3 of the Office Action, the examiner has kept the previous citation of Dijkstra *et al.*, however, did not provide any response to the arguments submitted on October 26, 2007, but indicated that no new arguments have been presented. Applicants request the examiner to consider the arguments presented previously (for example, see pages 4-5 of the response filed on October 26, 2007) and to withdraw the rejection.

One page 3 of the Office Action, the examiner has referred that Dijkstra *et al.* disclose a process for crosslinking UHMWPE in the melt comprising heating a preform in a nitrogen atmosphere at 200°C with an electron beam. Applicants point out that instant claims recite heating the preform to a temperature above the melting point of the UHMWPE to about 230°C (see claim 124) or more (for example, 300°C in claim 127). Therefore, Dijkstra *et al.* does not disclose the limitations as recited in the claims.

In view of the above clarifications and arguments, applicants request withdrawal of the anticipation rejection.

Double Patenting Rejection:

On pages 5-6 of the office action, the examiner maintains the provisional rejection of the claims 124-127 under the judicially created doctrine of obviousness-type double patenting and alleges as being unpatentable over claims 124-129, 131-134, and claims 124-125, 130, 143-146 of co-pending application serial nos. 10/197,209 and 09/764,445, respectively. In response, applicants reiterate, because applicants have not received any notice of allowance for the '209 or the '445 applications, the merits of this provisional rejection need not be discussed by at this time. See MPEP § 822.01 (Rev. 5, August 2006).

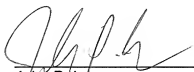
REQUEST

Applicants submit that claims 124-129 are in condition for allowance, and respectfully request favorable consideration to that effect so that an interference can be declared with applicants as the senior party by virtue of the priority afforded by the priority applications. The examiner is invited to contact the undersigned at (202) 416-6800 should there be any questions.

Respectfully submitted,

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Date



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